X-Sieve: CMU Sieve 2.3

Date: Thu, 11 Sep 2008 22:05:38 +0100 From: Pieter Blue <pblue@staffmail.ed.ac.uk>

To: wtc@nist.gov

Subject: Final Report on WTC 7

X-Edinburgh-Scanned: at nougat.ucs.ed.ac.uk

with MIMEDefang 2.60, Sophie, Sophos Anti-Virus, Clam AntiVirus

X-Scanned-By: MIMEDefang 2.60 on 129.215.13.205 X-Scanned-By: MIMEDefang 2.52 on 129.215.149.64

X-Proofpoint-Virus-Version: vendor=fsecure engine=1.12.7160:2.4.4,1.2.40,4.0.166

definitions=2008-09-11\_12:2008-09-02,2008-09-11,2008-09-11 signatures=0

X-PP-SpamDetails: rule=spampolicy1\_notspam policy=spampolicy1 score=0 spamscore=0 ipscore=0 phishscore=0 bulkscore=0 adultscore=0 classifier=spam adjust=0 reason=mlx

engine=5.0.0-0805090000 definitions=main-0809110136

X-PP-SpamScore: 0

X-NIST-MailScanner: Found to be clean

X-NIST-MailScanner-From: pblue@staffmail.ed.ac.uk

X-NIST-MailScanner-Information:

(I have attached a copy of this letter as pdf file.)

To Whom It May Concern,

I am writing to comment on the recently released ``Final Report on the Collapse of World Trade Center Building 7" (NIST NCSTAR 1A) and ``Structural Fire Response and Probable Collapse Sequence of World Trade Center Building 7" (NIST NCSTAR 1-9). It has been suggested in the media that the fuel oil system for the Office of Emergency Management (OEM) contributed to the collapse of World Trade Center 7. The report concluded that fires on floors 7-12, particularly 7, 11, and 12, lead to the collapse of the building. Given this, I would like to know if the OEM system did contribute to the fires on floor 7 or nearby floors, and, if so, to what extent, and if this contributed to the collapse of WTC 7. I am a US citizen currently living abroad.

The reports investigate several possible contributing factors and scenarios. The reports contain an extensive investigation of the possibility of a fuel oil fire on floors 5 and 6 and conclude that such a fire is not consistent with observations. The report also conclude that the oil in the day tanks would not have been sufficient to significantly contribute to the fires. On page 11 of NCSTAR 1A, it is reported that fuel which supplied the generators on floors 8 and 9 was recovered. Thus, the reports clearly concludes that it is not possible that fuel oil fires on floors 5, 6, 8, and 9 contribute to the collapse of the building and that the fuel in the day tanks did not contribute significantly to the fire which caused the collapse of the building.

I have not been able to find a similar conclusion concerning the

possibility that the fuel system for the generators on floor 7 contributed to the fires and the collapse of the building. On the contrary, on page 12 of NCSTAR 1A, concerning the possibility that fuel in the first floor tanks could have supplied the fires on floor 7, the report states that "NIST assumed that all the fuel was available". On page 26 of NCSTAR 1A, the report states that diesel fuel could have contributed to the fires on floor 7. In the longer report NCSTAR 1-9, I have also been unable to find a clear conclusion about the possibility of the OEM fuel system contributing significantly to the fires on floor 7. On page 63 of volume 1, concerning the possibility that the fuel for the generators on floor 7 could have contributed to the fire, it is stated that it is "possible that a break in the day tank supply line on the 7th floor could shave led) to a diesel fuel pool on this floor." On page 355 of volume 1. it is again concluded that the collapse of the building was not caused by either fuel fires supplied by the supply lines to the generators on floor 5 or by the fuel in the day tanks on floors 5, 7, 8, and 9, but no conclusion was made about the possible role of the fuel supplying the generators on floor 7. On page 377 of volume 2, the report concludes that a fire fueled by the oil supply for the generators on floor 7 would not have generated so much smoke so as to be inconsistent with what was observed. In addition, from the calculations on this page, that the 600 gallons of fuel oil in the three day tanks on floors 7-9 would have provided an average of 1% more to to the total combustible materials if spread evenly over the three floors, it seems reasonable to me to conclude that had all 6000 gallons of fuel oil supplying the generators on floor 7 could have contributed roughly 30% to the total amount of combustible material on floor 7. This does not seem inconsequential. Despite this, it is further stated on page 355 of volume 2 of NCSTAR 1-9, that the possible effect of diesel fuel oil fires on floor 7 were not included in the computer simulations of the fire. The computer simulations. shown on page 380 and 383 of volume 2 of the report, suggest that the highest temperatures of the fire were not in the north east corner. where the failure of column 79 triggered the collapse of the building. Thus, it would seem reasonable to conclude that a hypothetical diesel oil fueled fire on floor 7, even on the south side of the building. could have contributed to the collapse of the building.

Given that the report did not rule out the possibility that diesel fuel oil supplying the generators could have contributed to the fires on floor 7, that such a fire would have been consistent with the level of smoke observed, that it seems that the amount of fuel available could have contributed significantly to the total amount of combustible materials on floor 7, and that fires on floor 7 contributed significantly to the collapse of the building, I would be interested in seeing a further analysis of the possible effects of such a fire. Amongst other things, I would be interested in seeing a summary of computer simulations which compared possible collapse

scenarios both with and without such fires.

The attack on the World Trade Center on 11 September 2001 was probably the worst tragedy on US soil since the civil war. In comparison to the enormous loss of life, the collapse of WTC 7 is relatively minor. Nonetheless, I would like to thank you and everyone involved with preparing these reports. I hope you will be able to respond to my concerns.

Sincerely, Pieter Blue

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11 September 2008

WTC Technical Information Repository, Attn: Stephen Cauffman, NIST, 100 Bureau Dr., Stop 8611, Gaithersburg, Md. 20899-8610 wtc@nist.gov

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